



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,536	12/29/1999	QINGYU ZENG	24707A	2359

22889 7590 04/12/2002

OWENS CORNING
2790 COLUMBUS ROAD
GRANVILLE, OH 43023

EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
----------	--------------

1771

8

DATE MAILED: 04/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/474,536

Applicant(s)

ZENG ET AL.

Examiner

Norca L. Torres-Velazquez

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Rejection of claims 1-4, 6-7 and 9-13 under 35 U.S.C. 102(b) over CHENOWETH et al. are withdrawn in view of Applicant's arguments.
2. However, claim 1-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over CHENOWETH et al. in view of SWAN et al.

a. Applicants argued that CHENOWETH et al. fails to disclose a product incorporating any form of perimeter flange, that CHENOWETH et al. teaches applying a scrim or film to one or both surfaces of the product while Applicants invention provides a facing material comprising a combination of a scrim web and a film.

CHENOWETH et al. teaches that if desired, a foraminous or imperforate film or skin may be applied to one or both surfaces of the product during its manufacture to enhance the surface finish of the product. A fabric or cosmetic materials may also be applied to one or both surfaces to provide a finished surface. (Column 3, lines 32-37) It is noted that the references teachings does not preclude the use of a second material in combination with a scrim.

b. Further, Applicants argue that there is no disclosure in CHENOWETH of the concept of providing any form of perimeter flange in order to increase strength or rigidity.

In response to Applicants' argument that there is no disclosure in CHENOWETH to increase strength or rigidity by providing any form of perimeter flange, the fact that CHENOWETH uses their invention in applications such as motor vehicle headliner and the secondary reference SWAN et al. provides motivation to provide "reduced thickness

areas” to promote the integrity of the laminate does not alter the conclusion that its use in a prior art device would be *prima facie* obvious from the purpose disclosed in the reference.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHENOWETH et al. (US 4946738) in view of SWAN et al. (US 5773375) as stated in previous action.

CHENOWETH et al. discloses a non-woven fibrous product that can be used as insulation and as a motor vehicle headliner. (Column 1, lines 26-32) Their invention relates to a *non-woven blanket* or mat consisting of matrix of mineral, i.e., glass fibers and man-made, i.e., synthetic fibers. The synthetic fibers are of two types. The first type is conventional, homogeneous solid or hollow fibers of polyester, among other materials. The second type is bi-component core and sheath fibers of materials, typically polyesters, having distinct melting points. The reference further discloses that *a scrim and additional fabric or cosmetic coverings* may be applied to one or both surfaces. (Column 2, line 67 – Column 3, lines 1-10).

CHENOWETH et al. further teaches that the density of the product may be adjusted by selection of fiber size or by adjusting the degree to which this blanket is compressed during forming operations. (Column 3, lines 40-44).

It is noted that CHENOWETH et al. is silent with respect to the claimed perimeter flange. However, it is reasonable to presume that the claimed flange is inherent to the invention of CHENOWETH et al. Support for said presumption is found in the use of the same starting materials (i.e. non-woven blanket, a scrim and additional fabric), like processes of making the articles (i.e., pressure molding by which the density of the product may be adjusted), and the production of similar end-products (i.e., insulation product, etc...). The CHENOWETH et al. teaches the use of their laminate in sheets, panels and complexly curved and configured products and that it has particular motor vehicle application as a motor vehicle headliner. As described in the paragraph above, the density of the product may be adjusted by adjusting the degree to which the blanked is compressed. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

However, the CHENOWETH et al. reference does not teach a facing material that is water resistant.

SWAN et al. teach a laminate that has desirable acoustical insulation properties that can also act as a water shield or barrier to prevent water from entering a vehicle body. The reference teaches that it has broader applications and could be equally adapted for use in providing acoustical insulating and water barrier properties to other articles. The laminate includes a *water barrier layer* such as a planar thermoplastic film and it further teaches the use of polyolefins such as polypropylene, as the preferred materials for the film. SWAN et al. also teaches that the laminate can induce an optional scrim layer to increase the integrity of the laminate. (Column 5, line 53 – Column 6, lines 1-67).

The reference further teaches that the laminate is typically pressure molded to form reduced thickness areas along its outer periphery. In Fig.1 side edges 18 are shown.

Since both CHENOWETH et al. and SWAN et al. are from the same field of endeavor, insulation materials, the purpose disclosed by SWAN et al. would have been recognized in the pertinent art of CHENOWETH et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the insulation product and provide it with a film as one of the optional additional fabrics for the purpose of providing the laminate with water barrier properties as disclosed by SWAN et al. (Column 5, lines 58-60)

Regarding to claims 1, 3-4, 12 and 13, although the perimeter flange is considered to be inherent to CHENOWETH et al.'s invention as described in paragraph 2 above, it would also have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the insulation product with an perimeter flange with higher density than the rest of the blanket and with reduced thickness for the purpose of promoting the integrity of the laminate in that area to be easily handled by manufacturers during assembly operations as disclosed by SWAN et al. (Column 6, lines 44-47).

It is noted that both CHENOWETH et al. and SWAN et al. are silent with respect to the claimed static coefficients of friction. However, it is reasonable to presume that the claimed static coefficient of friction is inherent to the inventions of CHENOWETH et al. and SWAN et al. Support for said presumption is found in the use of the same starting materials (i.e. uses PTE fibers and polypropylene film), like processes of making the articles (i.e., pressure molding), and

Art Unit: 1771

the production of similar end-products (i.e., acoustical insulation, etc...). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

5. Claims 1-2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAINES et al. (US 5459291) in view of SWAN et al. as stated in previous action.

HAINES et al. discloses a sound absorption laminate comprising a porous insulation substrate, such as, a thermoplastic glass or polymeric fiber blanket and a facing sheet with a high airflow resistance. (Abstract) The reference teaches that typical applications for this material include: automotive headliners and hood liners. (Column 1, lines 19-26)

However, the reference does not disclose a perimeter flange.

SWAN et al. teaches that the laminate is typically pressure molded to form reduced thickness areas along its outer periphery. In Fig.1 side edges 18 are shown.

Since both HAINES et al. and SWAN et al. are from the same field of endeavor, the purpose disclosed by SWAN et al. would have been recognized in the pertinent art of HAINES et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the insulation product with an perimeter flange with higher density than the rest of the blanket and with reduced thickness for the purpose of promoting the integrity of the laminate in that area to be easily handled by manufacturers during assembly operations as disclosed by SWAN et al. (Column 6, lines 44-47).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1771

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 7:30-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

nlt
April 3, 2002



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700